How can we dispose of drugs safely?

Where available, take your unwanted or expired medications to a local collection site. Contact your pharmacist, recycling coordinator, or local health department to find out if there is a household hazardous waste collection or drug take-back program in your area.

You can dispose of most unwanted drugs in your household trash. To avoid intentional or accidental misuse, place them in a bag, mix with water and other undesirable substances such as coffee grounds or cat litter, then tape shut.

Flush prescription drugs down the toilet only if the label or accompanying patient information specifically instructs doing so. The Food and Drug Administration recommends that certain controlled drugs be flushed down the toilet because they are extremely powerful and/or addictive.

American Water Works Association

Catalog No. 70149

Printed on Recycled Paper

www.awwa.org

Pharmaceuticals in your drinking water?

What you should know.

The truth about pharmaceuticals and personal care products in drinking water

Recent media reports about the detection of medications and personal care products in drinking water have raised significant consumer concerns. And rightly so. No one wants to drink someone else's medicine along with their glass of tap water.

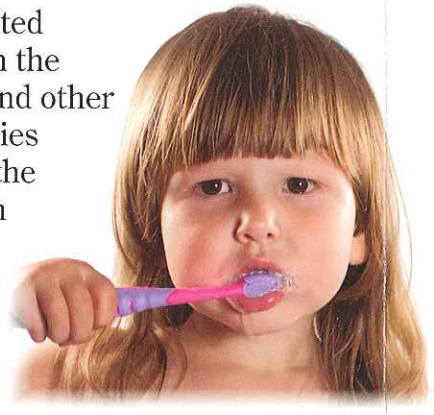
The fact is, a variety of chemicals, including pharmaceuticals, fragrances, vitamins, and cosmetics, have been found at extremely low levels in source water and some treated water.

Water isn't the only way we are exposed to these chemicals. We use these products every day. We drink coffee, take aspirin, use insect repellent, and wear sunscreen. All of these actions and uses expose us to these chemicals in concentrations millions of times higher than we could ever find in water.

How do these chemicals get into our water?

The answer is, we put them there. When we take medications, not all is used by our bodies—the remainder is excreted and ends up in the wastewater system. Likewise, the residue from the creams, oils, colognes, soaps, and insect repellents we use on our bodies gets washed down the drain when we bathe.

For years, we've been told to flush expired or unwanted medications down the toilet. Hospitals and other health-care facilities have been doing the same thing, but in even greater quantities. Thankfully, that practice is changing.



A threat to public health?

The existence of these chemicals in drinking water is complex. In many instances, new technology that allows us to detect minute traces of chemicals is the real news. We can now measure chemicals in parts per trillion, equal to about 1 teaspoonful in 1,000 Olympic-size swimming pools. Trace amounts of drugs and personal care products have been present in water for many years. We've only recently improved our ability to detect them.

The question remains: if a contaminant can be detected, does it constitute a health risk? There is simply no evidence to suggest that such minute concentrations of these chemicals pose any threat to consumers.

Are chemicals in water regulated?

In the US, about 90 different drinking water contaminants are currently regulated. Utilities must test and treat their water to ensure that these chemicals do not appear in finished water above established guidelines. As of early 2009, no pharmaceuticals or personal care products are regulated. Scientific data doesn't yet exist about the health effects of these chemicals at trace levels, although research is ongoing.

Public health, regulatory, and water utility professionals are all concerned about what's in our water. After all, providing safe drinking water is our top priority. We're constantly assessing the threats posed by a variety of chemicals and other contaminants, determining how best to regulate and remove them.

Is tap water safe to drink?

With all the safeguards followed by most North American water utilities, tap water is safe to drink. The concentrations of contaminants are so low that the risk of any health threat is presumed to be nominal, if not non-existent.

Consider that the highest concentration of any pharmaceutical found in drinking water is 5 million times lower than the therapeutic dose. Millions of people use and consume mixtures of these chemicals every day at astronomically higher concentrations than have been found in water. Still, research is underway to scientifically assess these risks. Public health officials and your utility are watching the situation closely.